

GAMING DEVICE AND METHOD DISPLAYING SYMBOLS
IN A POLYGON ARRANGEMENT

5 Cross Reference to Related Application

This application is a utility conversion application of prior filed and commonly owned provisional application Ser. No. 60/402,982 file August 12, 2002 and titled " Gaming Device and Method Displaying Symbols In A Polygon Arrangement".

10 Field of the Invention

The present invention relates to electronic Poker games and devices therefor.

Background

15 Video Poker is a well known game played using and electronic device such as computer with a display, a hand-held device or with a dedicated, video Poker gaming machine. In that the play of basic video Poker is the same whether it is played with a hand held, electronic novelty device, with a computer, through the Internet or with a dedicated gaming machine, the following description is primarily directed to a dedicated, video Poker gaming or video lottery machine of

the type found in casinos.

To play the game according to the prior art, the player makes a wager by any suitable means such as by wagering credits, inserting tokens or the like. Once the wager is made the machine is prompted for play whereupon the processor for
5 machine randomly selects from data representing a deck of playing cards, data representing ten playing cards. This data need is not arranged in any order and typically is configured as a data string representing the cards of the deck in no particular order. From this randomly selected data, five playing cards are displayed in a straight row representing the initial holding and the data for the
10 remaining five cards is held in inventory. The player, using a touch screen on the game display or buttons on the machine or other input means such as a keyboard or mouse, selects which cards to discard, if any, from the initial holding. The data representing the discarded cards is replaced with the inventoried data and the replacement cards are displayed. The final hand is (with or without replacement
15 cards) is compared to a schedule of winning hands based on the ranking of hands of Poker. If the player has a winning final hand, they are paid based upon their wager. If they do not have a winning hand, their wager is lost. After determination of the outcome of the hand, the player makes another wager and plays the next hand according to the above.

It is further known to provide games according to the above based upon a Deuces Wild, Joker's wild and Joker's and Deuces wild format. It has also been known to display and play multiple hands such as described in Moody, U. S. Patent No. 5,823,873 titled "Method of Playing Electronic Video Poker Games".

5 There is a need for new and improved games for video Poker which have new and entertaining displays, which involves the play of multiple hands arranged new and entertaining patterns and wherein one or more cards can be shared by different Poker hands on the display.

Summary of the Invention

10 There is, therefore, set forth according to the present invention a device and method which presents the play of multiple hands of Poker in a new and entertaining display-form which also provides for hands to share cards.

 Accordingly an improved method and electronic gaming device of the type having a video display, a computer processor to control the device and display, a
15 first data structure storing data representing each card of at least one deck of playing cards for the game and a wager acceptor is set forth which further includes that the processor is configured to randomly select from said data structure and display at least N five card hands at the display. Each hand is arranged on a side of a polygon having N sides, adjacent hands sharing at least one card at the corner

intersection thereof. A second data structure stores data corresponding to hand winning outcomes and awards. This data may instead be stored in the first data structure. The processor is configured to compare each hand N to said data structure and, for each winning outcome, issue a corresponding award.

5 In one embodiment $N = 3$ whereby the polygon is a triangle. In another embodiment, the device further comprises a player input device configured for the player to select none, one or more cards of one or more hands N to discard and replace. The processor is further configured to select and display data representing a replacement card for each discarded card to define final hands and
10 compare each final N hands to said data structure and for each winning outcome issue a corresponding award.

As can be appreciated, the present invention provides for cards of hands to be shared and also for the player to discard and replace. This game presents the players with unique displays, e.g. hands arranged in a square or triangular pattern
15 as well.

Brief Description of the Drawing

FIG. 1 shows an example of a device for playing one illustrative embodiment of the game; and

FIG.2 shows another example of a device for playing another embodiment.

Description

Turning to the drawing there is shown a device 10 for playing an embodiment of the game according to the present invention. The device includes a housing 12 which contains a game processor 13 of known design as well as, if
5 desired a coin hopper and coin dispensing mechanism (not shown). The housing 12 also supports a game display 14 which is controlled by the game processor 13 as hereinafter described. Preferably the display 14 is a touch screen display so that the player may touch the screen to provide input to the processor 13. Disposed on the housing 12 may be a cash validator 16 of known construction and adapted to
10 read and validate cash inserted therein to accumulate gaming credits, which are shown at a credit meter 18. In lieu of cash or script, the device 10 may accept coins at a coin acceptor 20 to make wagers or accumulate game credits.

To input wagers to play a hand of play of the game according to the present invention, the player may depress a Bet Max button 22 which prompts the
15 processor 13 to debit the maximum amount permitted to be wagered, e.g. 15 credits for three hands, and accept that as the wager as well as prompt play of the hands of play as hereinafter described. Alternatively the player may wager any amount by repeatedly depressing a Bet One button 24 or by touching a Bet One icon 26 displayed on the touch screen display 14. A bet meter 28 registers the

amount being wagered by the player for a hand of play.

If the player has wagered the maximum amount permitted, e.g. 5 credits/coins/tokens per hand, play of a hand is automatically prompted by the game processor. Otherwise, where the player has wagered less than the permitted maximum, the player prompts play by depressing a deal/draw button 30 or deal/draw icon 32 on the display 14.

When a wager has been made and play prompted. the processor 13 randomly selects cards for the hands of play from a first data structure 30 storing data representing each card of a randomly shuffled standard deck of fifty-two playing cards and controls the display 14 to display the hands in a polygon pattern as shown in the drawing. It should be noted that where the desired display is a triangle as shown, the processor 13 randomly selects nine cards for the polygon arrangement of three game hands, i.e. Hand 1, Hand 2 and Hand 3. Each of the game hands is disposed along a side of the polygon and at least two of the hands share a common card. Thus the display 12 may display the game hands as:

Q

Hand 1 K 4 Hand 2

7 5

5 Q 5 Q

5 Hand 3

Viewing the polygon (triangle) counter-clockwise from the apex;

Hand 1 Q K 7 5 Q (shown in bold)

Hand 2 7 5 Q 5 Q

Hand 3 5 Q 5 4 Q

10 As can be seen each hand on an adjacent side shares at least one card. Using the touch screen display 14, the player for each hand may select cards to hold. For example the player may hold cards (shown as cards with the "H" notation) for each of the hands as follows:

Hand 1 Q K 7 5 Q

15 H H H

Hand 2 7 5 Q 5 Q

 H H H H

Hand 3 5 Q 5 4 Q

 H H H H

		Pay Schedule	
		Royal Flush	4000
		Straight Flush	250
		Four of a Kind	125
5		Full House	45
		Flush	30
		Straight	25
		Three of a Kind	15
		Two Pair	10
10		Pair of Jacks or Better	5

After the processor 13 has determined and paid any winning hands, the player would have another opportunity to make a new wager to play another three hand set.

15 With reference to FIG. 2, another embodiment of the game is shown. Like components have like reference numerals.

Like the embodiment described above, upon prompting of play the processor 13 randomly selects and displays twelve cards representing three five-card hands arranged and displayed in a triangle form. Each of the hands shares two cards (the cards at the corners of the triangle) with the other two hands. Thus 20 Hand 1 shares the corner cards with Hands 2 and 3 and so forth. Thus the sharing of the cards at the corners of the triangle polygon presents various strategy challenges to the player as described above.

It should be understood that while in the following example a polygon-form

of a triangle was used, that the present invention is suitable for other polygon forms such as squares (four sides) and other polygons. For example, a square display of four hands may be as follows:

		Q			Hand 1	
5		J	5	7	J	10
	Hand 2	A			K	
		2			4	Hand 3
	A	7	10	6	7	
	Hand 4				9	

10 As shown each five card hand shares at least one common card with another hand. Thus the player must exercise a degree of strategy in regards to holding any shared cards. Further, if any shared cards are discarded, the replacement will be for the two sharing hands.

Still further it should be understood that the game and device of the present
 15 invention may be played in a "Deuces Wild", "Joker's Wild" (53 card deck), "Deuces and Jokers Wild", Double Joker, One-eyed Jacks Wild format.

The arrangement of the hands in a polygon can also provide for bonuses such as 6 or 7 card flushes or straight flushes in addition to the holding os the five card hands. That is, the second data structure 32 may include 7-card winning

hands as well.

It should also be understood that the pattern of hands may be changed from that described above and may define hands of more or fewer than five cards, e.g. 7-card hands. The game could also be played in a Stud Poker format where the
5 player is not permitted to replace cards. Also, each hand may be dealt from a separate deck which can result in holdings of five of a kind.

It should further be noted that certain hands may be played according to different rules. For example, certain hands of the polygon may be played as draw Poker hands with others played as Stud Poker hands, Deuces Wild or Joker's Wild
10 hands.

While I have shown and described certain embodiments of the present invention, it should be understood that the same is subject to modification without departing from the spirit and scope of the invention.